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TONE SYSTEMS OF IGBO, YORUBA AND IBIBIO: A COMPARATIVE ANALYSIS AND THE LINGUISTIC IMPLICATIONS

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Abstract

This paper aims at providing a comparative analysis of the tonal systems of Igbo, Ibibio, and Yoruba, highlighting their similarities and differences. By examining tone types, distribution and lexical functional load, the analysis aims to contribute to a deeper understanding of tone as a linguistic phenomenon and its implication in language learning. Using a structured corpus, data was obtained by means of elicitation from six consultants (that is, two native speakers of each of the languages, purposively selected). Also, existing scholarly works served as reliable sources as many works have been done on the phonology of these languages. The paper adopted the Contrastive Analysis (CA) method propounded by Lado (1957). The findings showed that Igbo and Ibibio languages do not have mid-tone, Yoruba and Igbo do not have contour tones. Again, Yoruba does not have a down-step tone. The analyses show that the languages exhibit tonal complexity which means that learners and speakers must rely on tone to avoid ambiguity. This paper therefore concludes that, the differences in tonal structure of the languages can constitute pronunciation problems for native speakers of one of the languages learning another, as they would unconsciously transfer the pronunciation pattern they have internalised for their mother tongue (MT) or first language (L1) into their target language (TL). This paper recommends that learners of second language (L2) should be taught to produce and master appropriate application of the tones in the L2 which are lacking in their first language (L1), to prevent pronunciation errors and ambiguity.

Keywords: Tone Systems, Ibibio, Yoruba, Igbo.

Introduction

Languages have been compared since antiquity. For example, in the 1st century BC the Romans were aware of the similarities between Greek and Latin, which they explained mythologically, as the result of Rome being a Greek colony speaking a debased dialect. While traditional linguistic

studies had developed comparative methods (comparative linguistics), chiefly to demonstrate family relations between cognate languages, or to illustrate the historical developments of one or more languages, modern contrastive linguistics intends to show in what ways the two respective languages differ. Contrastive descriptions can occur at every level of linguistic structure: speech sounds (phonology), written symbols (orthography), word-formation (morphology), word meaning (lexicology), collocation (phraseology), sentence structure (syntax) and complete discourse (textology). Igbo and Yoruba belong to the Kwa language sub-family of the Volta-Congo and Atlantic-Congo branches of the Niger-Congo language. According to Heine and Nurse (2000), the languages currently known as Kwa are spoken along the Atlantic coast of West Africa from the south-eastern quadrant of Cote d'Ivoire to the extreme south-western corner of Nigeria. Ibibio language belong to the *Lower Cross* sub-group which spreads across the Cross River and parts of Rivers States. It is spoken by the Ibibio people of Akwa Ibom State in the South-South zone of Nigeria (Udoh, 2019; Udoh, Anyanwu and Sylvanus, 2025).

Tone is a central feature in the phonological systems of many African languages, particularly within the Niger-Congo language family, where it functions not merely as a lexical differentiator but also as a grammatical operator (Hyman 2011). Researches on African tone systems have played a vital role in phonological theory ever since auto-segmental phonology was propounded by Goldsmith (1976). Spread and shift of tone, floating tones and tone melodies as well as down-step are well-documented properties of African tone, manifesting the fact that tones owe little allegiance to the segments realizing them. Tone is a widespread phenomenon in Nigerian languages as most languages of Nigeria such as Hausa, Igbo, Yoruba, Ibibio are all tone languages, except Fulfude (Williamson 2006; Udoh, Anyanwu and Sylvanus, 2025). This study seeks to provide a comparative analysis of the tonal systems of Igbo, Ibibio, and Yoruba, highlighting their similarities and differences. By examining tone types, distribution, phonological behaviour, and lexical functional load across the three languages, the analysis aims to contribute to a deeper understanding of tone as a linguistic phenomenon and its implication in language learning.

Theoretical Framework

The Contrastive Analysis (CA) method propounded by Robert Lado in Lado (1957) is adopted for this study. Contrastive analysis is the systematic study of a pair of languages with a view to identifying their structural differences and similarities. Historically it has been used to establish language genealogies. CA research offers insight to subtle differences among languages. Chestermann (1998) summarizes CA to include two main processes - description and comparison. For him, languages are described and compared in CA; from the comparison, potential difficulties for learners are predicted from the differences and the extent to which the languages are alike are equally shown from the similarities. According to Firbas (1992) cited in Eme and Uba (2016), the contrastive method proves to be a useful heuristic tool capable of throwing valuable light on the characteristic features of the languages contrasted. This means that when we compare languages, the features of each language are clearly seen and this, in addition, contributes to a better description of each individual language. Moreover, CA is often and primarily done for pedagogical purposes, with the aim to provide better descriptions and better teaching materials for language teachers and learners. Contrastive linguistics, since its inception (Lado 1957), has often been linked to aspects of applied linguistics, to assist inter-lingual transfer in the process of translating texts from one language into

another, as demonstrated by Hatim (1997) and to find lexical equivalents in the process of compiling bilingual dictionaries, as illustrated by Heltai (1988) and Hartmann (1991).

Methodology

The analysis draws on both field data and existing corpora of previous scholarly descriptions. Using a structured corpus, data was obtained by means of elicitation from six adult language consultants (two native speakers of each of the languages – Igbo, Yoruba and Ibibio) and was digitally recorded. Purposive sampling technique based on age, competence in the languages was used to select the language consultants. The language consultants were adult native speakers of the languages within the ages of 35-50, who have spent minimum of 30 years in their native towns. The discussion is on the Contrastive Analysis (CA) of Igbo, Ibibio and Yoruba. The data in this paper shows phonological representation of the lexical items in Igbo, Ibibio and Yoruba with the gloss in English. The adopted tone marking convention marks high tone with acute accent [´], low tone with grave accent [`], over a vowel or syllabic nasal and the downstepped high tone by an exclamation mark [!] before the syllable that bears the downstepped high tone, while the mid tone is left unmarked.

Tone

Tone has been defined as contrastive pitch, a phenomenon arising from the vibration of the vocal cords. It is the use of pitch in language to distinguish lexical or grammatical meaning – that is, to distinguish or to inflect words. By pitch contrast is meant that the changes or variations in pitch affect the meaning of a word. All verbal languages use pitch to express emotional and other paralinguistic information and to convey emphasis, contrast, and other such features in what is called intonation, but not all languages use tones to distinguish words or their inflections, analogously to consonants and vowels. Languages that do have this feature are called tonal languages; the distinctive tone patterns of such languages are sometimes called tonemes by analogy with phoneme. According to Welmers (1973), “a tone language is a language in which both pitch phonemes and segmental phonemes enter into the composition of at least some morphemes”. Essien (2010, p.85) views tone as “a purely phonological matter...whether one views it as a supra-segmental or Goldsmith’s (1976) auto-segmental, the child learns it as part of a lexical item”. Pike (1948) makes a distinction between types of tone languages, namely register and contour tone languages. Urua (2007) sees a register tone language as a language in which the tones remain as level pitches, relative to one another with little or no gliding pitches; while a contour tone language has gliding pitches where the contrasts are rising or falling without being relative to one another.

Welmers (1973) further subdivides Pike’s (1948) register tone languages into two classes, which he calls discrete level and terraced level systems. A discrete level system is a language in which the relative height of the different tone units is kept separate so that there is no intersection between their phonetic realisations. And a terraced level tone system is a language in which there is intersection between the tonal realisations. In tone languages, the tone is usually marked on the syllabic segments of the language. In phonetic transcription, tones are enclosed in square brackets beside or above the segments: [] is a high tone (H); [] is a low tone (L); [-] is a mid-tone (M), [!] is a down-stepped tone (!H), [ˇ] low high/ rising tone, [^] – High low/ falling tone, etc. Examples of words in Ibibio to illustrate tone marking in the language, taken from Udoh, Anyanwu and Sylvanus (2025, p.30) is shown below:

- 1a. mé - endure (H)
- b. dù - exist (L)
- c. ú!ké - where? (H-!H)

Functions of Tone in Tone Languages

Tone is an important element in African and Asian languages. It is used to make lexical (meaning differentiation) as well as grammatical distinctions in these languages, some of which include tense and aspectual distinctions (Udoh, Anyanwu and Sylvanus, 2025). According to Urua (2007), in addition to the lexical and grammatical functions, the significance of tone in African tone languages is seen in the fact that tone alone can be used to communicate messages, especially in dance music, where particular dance movements are communicated to the dancers through the drum beats which correspond to the tonal component equivalent to actual speech in the form of songs. In many tonal African languages, tones are distinguished by their pitch level relative to each other, known as a register tone system. Moreover, some African riddles are strictly tonal without any segmental component in that the riddle is posed in the form of a tonal component of the correspondent speech. The resolution of such riddles is based on the appropriate interpretation of the tonal component in the speech form of the riddle (Urua, 2007). Given the work done on tone languages, there is a consensus that the pitch of the voice is a significant constituent of a tone language. In a tone language (tonal language), alteration of the meaning of the words can be caused by different tones, even if the words are spelt alike. English and almost all other European languages are not tone languages. Apart from instances where certain tone bearing segments are toneless, there are instances where tones are not borne by any segments. Such tones are referred to as floating tones. Floating tone is a tonal manifestation, which is not clearly associated with any vowel or syllable, but whose effect can be observed on the neighbouring vowel or syllable. It is usually explained as a result of a lost segment (Urua, 2007).

The Tone Systems of Igbo, Yoruba and Ibibio

The languages being examined are geographically contiguous and genetically related. Their tonal systems diverge significantly in inventory, morphosyntactic roles and tonal processes. Yoruba is analysed by Laniran and Clements (2003) as having a three-tone system (High, Mid, Low) with phonologically significant downstep while Igbo and Ibibio are typically described as two-tone systems (High and Low), although both exhibit complex tonal alternations, sandhi phenomena, and prosodic restructuring (Clark, 1990, Essien, 1990, Urua, 2007).

The Ibibio Tone System

Essien (1990) observes that Ibibio has two basic level tones, high and low. Other significant tones in the language are low-high (LH) and high-low (HL), both of which are contour tones. The contour tones are simply modifications of these basic tones (Essien, 1990, Urua, 2007). Another such modification involves the high tone which can be lowered by a phenomenon called down-step. According to Urua (2007), the level tones and the downstepped tone occur in various environments. The low tone is represented by a grave accent marked over a vowel or a syllabic nasal, e.g. ìwá “cassava”. The high tone is represented by an acute accent marked over a vowel or syllabic nasal, e.g. dǎ “stand” and the down-stepped high tone by an exclamation mark before the syllable that bears the down-stepped high tone: ú!ké “where?”.

A high tone and a low tone may occur at the beginning of a syllable, medially or finally. Secondly, a low tone may only be followed by either another low (L) tone, a high (H) tone, a low-high (LH) tone or a high-low (HL) tone but rarely by a downstepped high tone, whereas, after a high tone, any other tones (a high, a low, a downstepped tone and contour tone) may follow it (Urua 2007). Examples taken from Urua (2007, p.54-55) are shown below:

- 2a. ènò - gift
- b. àṅwâ - cat
- c. ìtjě - place
- d. ú!ké - where?
- e. úfôk - house
- f. díppé - lift

The downstepped tone has a restricted distribution in Ibibio. It cannot occur in the prefix or stem initially; and “it may only occur following a preceding high tone and may not be followed by another downstepped tone except a high tone intervenes” (Urua 2007, p.55). For example:

- 3a. ú!ké - where?
- b. rí!bók - please
- c. ó!bóón - chief

In the language, contrasts (grammatical and lexical) are made based on tonal oppositions. Examples of lexical contrasts in Ibibio taken from Essien (1990, p.53) are shown below:

- 4a. wàk - tear
- wák - be many
- 4b. rí!bòk - please
- róbók - wrestle

The grammatical functions of tone in Ibibio includes to mark tense and to distinguish imperative constructions from progressive constructions. Examples of grammatical contrasts in Ibibio taken from Urua (2007, p. 56 -57) are shown below:

- | | Past tense | Present tense |
|-----|--|---|
| 4c. | àákon á!á dép òfòṅ
Akon has bought (a) dress | àákon á dêp òfòṅ
Akon is buying (a) dress |
| | Imperative construction | Progressive construction |
| 4d. | kàá ùdùà
Go (to the) market | ókâ ùdùà
I am going (to the) market |

The Igbo Tone System

Most varieties of Igbo, according to Emenanjo (2015), have two basic tones: High (H or ´), Low (L or `) and down-stepped High, (!). The high tone and the low tone may occur at the beginning of a syllable, medially or finally. Secondly, a low tone may only be followed by either another low (L) tone or a high (H) tone, but rarely by a downstepped high tone. For example:

- 5a. isì - blindness
- b. isí - five
- c. hízòkó - meeting

d. ìbèrîbè - foolishness, frivolity

In Igbo language, phonemic contrasts are realized in a two-way manner after a L: LL and LH as in ìsì “blindness” and ìsì “five” respectively; and after a H: HH, HL, H!H as in ísì “head”, ísì “smell” and í!sì “cook” (!H is a downstepped high, that is, a high tone which is one step lower than the preceding high). Therefore, lexically, the sequence of sounds [isi] will have different meanings in Igbo depending on the tones on which it is said.

Grammatically, Nkamigbo (2012) shows that the functions of tone in Igbo includes to distinguish statements from interrogatives, differentiate nominal constructions from verbal constructions, distinguish cardinal numbers from ordinal numbers, and to differentiate a sentence from a relative clause. Below are examples of grammatical functions of tone in Igbo taken from Nkamigbo (2012, p.1):

Statement	Question
6a. ó gàrà áhíá S/he went to the market	ò gàrà áhíá Did S/he go to the market?
6b. Nominal construction ísì ázò head of fish	Verbal Construction í!sì ázò (to) cook fish

According to Emenanjo (2015), gliding tones are not phonemic in Igbo, as Igbo is a discrete level tone language. Whenever gliding tones are identified on words in isolation, they are treated as two different pitch levels, on two identical vowels.

The Yoruba Tone System

In Yoruba language, there are three tones: high, mid and low. The tone bearing units are vowels and syllabic nasals. (It is important to note that the mid tone in Yoruba is usually left unmarked). Eme and Uba (2016), states that each of the tones in Yoruba can occur in all the possible environments (initial, medial, and final positions) and can be preceded or followed by any tone. In other words, the tones do not have restrictions on environments of occurrence. For instance, in Yoruba we have:

7a.pá	- plank (HH)
kó	
pákò	- chewing stick (HL)
kése	- mythological place name (HM)
8. àrá	- thunder (LH)
àrà	- wonder (LL)
àna	- in-law (LM)
igbá	- calabash (MH)
igba	- 200 (MM)
igbà	- girdle (ML)

(Some of the Yoruba words used in our examples in this section were adapted from Eme and Uba (2016) while others were provided by the informants).

Like in other tone languages, a word may have different lexical meanings depending on its tone. For example, the sequence of sounds “ere” will have different meanings depending on the tone with which it is said:

- 9a. eré - play
- Èrè - profit
- ère - statue

Tone also performs grammatical functions in Yoruba. Rafiu and Busari (2023), shows the use of tone in distinguishing between continuous, declarative and negative sentences in Òhàkò dialect of Yoruba. Examples taken from Rafiu and Busari (2023, p. 170) are shown below:

- 9b. ò n ń ló - I am going (continuous sentence)
- n ń ló - I will go (declarative sentence)
- n ò ló - I am not going (negative sentence)
- 9c. ò n ń jẹun - I am eating (continuous sentence)
- n ń jẹun - I will eat (declarative sentence)
- n ò jẹun - I am not eating (negative sentence)

Comparative Analysis of Tonal Systems in Igbo, Yoruba and Ibibio Languages

In this section, the tone systems of the languages under study are compared to discover the convergences and divergences.

Similarities in the Tonal Systems of Igbo, Yoruba and Ibibio Languages

From the discussions above it can be seen that Igbo and Ibibio languages have down-stepped tones. This tonal feature involves the lowering of a high tone. Thus the down-stepped high tone has a restricted distribution. While the high and low tones may occur in various positions in a word in the languages, the down-stepped high tone may neither occur in the prefix nor stem initially; it does not follow a low tone. Since it is a high tone that has been stepped down, it can only occur following a preceding high tone and may not be followed directly by another down-stepped high tone except a high tone intervenes. In Igbo, it is phonetically indicated as [!] and orthographically (ˊ) (Emenanjo 2015), while in Ibibio it is indicated with an exclamation mark before the syllable that bears the down-stepped high tone. Below are examples of words where the down-step tone occurs in Igbo and Ibibio languages with the gloss in English.

Igbo	Gloss	Ibibio	Gloss
10a. é!lú	-top	ú!ké	-where?
b. é!zé	-teeth	ú!kó	-yonder
c. é!gé	-money	ń!né	-young woman
d. ó!ké	-boundary	ú!dó	-there

Tonal Homophones

Igbo, Ibibio and Yoruba are tone languages which manifest items that are homophonic based on tonal parameters. Beside the contrastive functions of tone, we find that lexical items which are completely identical in both segmental and tonal content have different senses in terms of meaning in the languages. Below are some examples of tonal homophones:

Igbo	English (Gloss)	Ibibio	English (Gloss)	Yoruba	English (Gloss)
11a mbà	-country	tèm	-cause to sit	òké	-bag
b. mbà	-no	tèm	-cook	òké	-name
12a. ógù	-hoe	bèm	-precede	owò	-name of a town
b. ógù	-medicine	bèm	-watch over	òwò	-reverence
13a. ntú	-ashes	tèm	-show/explain	àlà	-boundary
b. ntú	-dust	mé			
		tèm	-take off from the	àlà	-white
		mé	source of heat		
14a. àgwà	-colour	kpé	-plead	adṣé	-monday
b. àgwà	-character	kpé	-pay	adṣé	-
					trade/business
c. àgwà	-beans			adṣé	-sales

Lexical Contrast

The languages have two contrastive level tones, that is, High (H), Low (L), although Igbo and Ibibio also have a down-stepped high tone (Emenanjo 2015, Essien 1990, Urua 2007). Lexical and grammatical contrasts are made in the languages purely based on the different tones found on the syllables, since the segmental components of the lexical items are completely identical. Below are some examples of lexical contrast in the languages:

Igbo	English (Gloss)	Ibibio	English	Yoruba	English
15 a. óké	-male	òbù	-crayfish	ìgbà	-season
b. òkè	-share	óbù	-dust	ìgbà	-girdle
c. òké	-rat			ìgbá	-calabash
d. ó!ké	-boundary			ìgbá	-garden egg
16 a. àdá	-daughter	wàk	-tear	eré	-play
b. á!dá	-fall	wák	-be many	èrè	-profit
				ère	-statue
1	-head	dèp	-to rain	ò	-rain
7	-smell	dép	-to buy	j	-cowardice
a.	-blindness			ò	-personal name
ísí	-to cook			o	
b.				j	
ísì				o	
c. ìsì				ò	
d. í!sí				j	
				ó	
18a.	-year	ń!bọk	-please	à	-thunder
áfò	-stomach	ńbók	-wrestle	r	-wonder
b. áfó				á	
				à	
				r	
				à	

Differences in the Tonal Systems of Igbo, Yoruba and Ibibio Languages

Contour (Gliding) Tones: Yoruba language does not have gliding tones. Gliding tones are not phonemic in Igbo, as Igbo is a discrete level tone language. As noted by Emenanjo (2015), whenever gliding tones are identified on words in isolation, they are treated as two different pitch levels, on two identical vowels; however, in Ibibio language, Essien (1990), Urua, Ekpenyong and Gibbon (2012) regard them as phonemic as they argue that both rising and falling tones contrast with level tones as seen in the following examples:

- | | |
|------------|-------------------------------|
| 19a. èkà | - mother |
| b. èkǎ | - go (plural) |
| 20a. ídém | - body |
| b. ídêm | - masquerade |
| 21a. ákpán | - the first-born son |
| b. ákpân | - a basket woven of cane |
| 22a. kpê | - expression of concern |
| b. kpé | - plead |
| 23a. mé | - be patient |
| b. mē | - if, or, whether |
| | |
| 24a. ndó | - defect |
| b. ndô | - fish (a kind of small fish) |

Essien (1990) summarize it thus: the contrast between the level tones, which have no gliding pitch and the contour tones which have gliding pitches is similar to the contrast between simple vowels and diphthongs which have glides. In a way, the contour tones of the supra-segmental of tone can be viewed as the diphthong counterpart of the vowel segment.

Mid Tone: Whereas Igbo and Ibibio languages do not have mid tone, Yoruba does. “Each of the tones in Yoruba can be preceded or followed by any tone. In other words, each of the tones can occur in all the possible environments - initial, medial, and final positions” (Eme and Uba, 2016, p.78). This is unlike the down-step tone in Igbo and Ibibio languages whose occurrences are constrained - the down-step tone cannot begin a canonical word. Since the down-step tone is acoustically regarded as dropping from a height and is perceived as such, it cannot be preceded by a low tone, rather, it can only follow a high tone or another down-step tone.

Linguistic Implications of Differences in Tonal System of the Igbo, Ibibio and Yoruba Languages

Since all three languages belong to the Niger-Congo (Benue-Congo) family, the linguistic implications of the tonal contrast between Igbo, Ibibio, and Yoruba are complex. However, their tone inventories, phonological patterns, and functions differ significantly. Particularly in the areas of phonology, morphology, syntax, language contact, and language acquisition, the implications of the tonal disparity between the languages are significant. Below is a detailed analysis:

Phonological Implications

Ibibio typically has a level and terraced tone system (High, Low, downstep, high-low, low-high), giving it a wider tonal range, whereas Yoruba is made of level tones (High, Mid, Low). Igbo, on the

other hand, usually has a two-tone system (High and Low) with downstep, giving it a discrete tone system. The three-level tone systems of Ibibio and Yoruba allow for greater grammatical and lexical distinction. Igbo uses downstep tone to enhance expressiveness while having a simpler two-tone system. These differences result in different phonemic loads for tone in each language, thereby, affecting how much tone contributes to meaning.

Lexical Distinctions

Tone differentiates lexical items across all three languages, though the extent of variation differs. In Yoruba, there are numerous instances of lexical pairs distinguished by tone (as illustrated in example 18: ìgbá – garden egg, ìgbà - season, igbà – girdle, igbá - calabash). Ibibio language exhibits a rich tonal contrast capable of encoding subtle semantic distinctions, whereas Igbo language, despite having fewer tones, still differentiates lexical pairs (as seen in examples 18-21). The functional burden of tone is increased as a result of the tonal complexity exhibited in the languages. To prevent ambiguity, speakers and learners must rely significantly on tone.

Lexical Ambiguity

In a discourse, tone can be used to highlight contrastive aspects or delineate grammatical boundaries. More complex possibilities for intonation and sentence mood are offered by Ibibio's three-tone system. Since many of the words in Yoruba and Igbo are tonal homophones that can be disambiguated by context, as seen in Example 14-17, their tone range frequently leads to higher lexical ambiguity than Ibibio, particularly in disyllabic or monosyllabic words.

Language Contact and Interference

Even in cases where vocabulary overlaps, tone patterns act as ethnolinguistic identity identifiers, aiding in the differentiation of language speakers (for instance, Igbo versus Ibibio speakers). Furthermore, speakers are prone to transfer tonal patterns in multilingual situations, which may cause interference or tone neutralisation in speech.

Implications for Language Learning

These differences in tonal structure of the languages may constitute pronunciation problems for native speakers of one of the languages learning another, as they would unconsciously transfer the pronunciation pattern they have internalised for their mother tongue (MT) or first language (L1) into their target language (TL) or second language (L2), by often substituting the 'unfamiliar' tones with some familiar tones that do not correspond with lexical items in their target language. Non-native speakers frequently lose subtlety or cause communication breakdowns when they misapply tone rules. Second, tone contrasts cause L1 interference, which impacts fluency and language learning. To prevent these pronunciation errors, pedagogical materials must explicitly teach tonal distinctions and their grammatical roles. It is important to teach language learners how to produce and master the tones they are unfamiliar with, such as the mid, down-step, and contour tones. The teacher (s) should pay close attention during the lessons and drills in order to identify and promptly correct any pronunciation errors made by the students. Following that, teachers should assess students' ability to produce and tone-mark lexical objects that are produced with those unfamiliar tones.

Summary and Conclusion

It was observed from the foregoing discussion that a syllable prefix in Ibibio can have a high tone. A high tone may be followed by a low tone, a downstepped high tone, or another high tone. It may be followed by a low-high (L-H) or high-low (H-L) contour tone in Ibibio, resulting in an H-HL or H-LH. In Ibibio, it is the only tone that can appear at the end of a syllable when citing disyllabic verbs. In the Ibibio language, the low tone can be found medially or at the start of a syllable (either on a syllable prefix or in the stem). Again, a low tone can be followed by a high tone (H), another low tone (L), a low-high (L-H), or a high-low (H-L), but rarely by a down-stepped high tone. While the high and low tones can occur in different places in a word, the down-stepped high tone can only appear after a previous high tone and cannot be followed immediately by another down-stepped high tone unless a high tone comes before it. Therefore, in the Ibibio language, the down-stepped high tone has a constrained distribution. All of the tones in Yoruba, however, are unrestricted because they might appear in initial, medial, or final positions. One of the implications of the differences in tonal structure of the languages is that learners and speakers must rely significantly on tone to avoid ambiguity, because, there exist copious occurrences of lexical pairs differentiated by tone. Additionally, it has been demonstrated that the languages have tonal homophones, that is, lexical words with the same segmental properties but distinct meanings. This is not the same as contrastive tones, where lexical items have identical segmental composition but different tones therefore have different meanings. Tonal homophones imply that context is the sole way to distinguish between different discourses.

It is important to note that differences in the tonal systems of the languages may cause pronunciation problems for native speakers of one language learning another. Besides, it is necessary to note that native speakers of one language may unconsciously transfer the pronunciation patterns they have internalised for their mother tongue (MT) or first language (L1) into their target language (TL) or second language (L2), by frequently substituting the "unfamiliar" tones with some familiar tones that do not correspond with lexical items in their target language. The language learners, should be taught to produce and master the unfamiliar tones (such as mid, down-step, and contour tones) in order to avoid these pronunciation errors. The teacher(s) should pay close attention throughout instruction and drills in order to identify and promptly correct any pronunciation errors made by the students. Following that, teachers should assess students' ability to produce and tone-mark lexical items produced with those unfamiliar tones. Through a comparative perspective, this study has shown structural similarities and differences between the tonal systems of Igbo, Ibibio, and Yoruba. By doing so, it contributes to the broader typological and theoretical literature on tone.

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